

TITLE OF THE INVENTION

GENE EXPRESSION PROFILE FOR KSHV INFECTION AND METHODS FOR
TREATING SAME

5 ABSTRACT OF THE INVENTION

10 The present invention utilizes nucleic acid microarray technology to identify changes
in the host endothelial cell transcription pattern that occurs during the latent and lytic
phase of the KSHV life cycle. The production or activity of some genes up regulated
during the lytic cycle were subsequently inhibited, and two such targets were shown to
15 have a role in expression of late viral genes. Using this combined approach we have
identified cellular pathways previously unknown to be important for KSHV infection,
and present evidence for the efficiency of the novel antiviral approaches thus
discovered. In addition, the present invention identifies a wide variety of endothelial
cells genes and pathways that are involved in a variety of endothelial cell-mediated
activity, including angiogenesis and transformation.